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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,308	07/29/2003	Zhong Zhang	TPIP018	6429

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EXAMINER	
GEMBEH, SHIRLEY V	
ART UNIT	PAPER NUMBER
1618	
MAIL DATE	DELIVERY MODE
01/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/629,308	ZHANG ET AL.	
	Examiner	Art Unit	
	SHIRLEY V. GEMBEH	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,6,8,9 and 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 6, 8-9 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/19/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendments

1. The response filed 10/7/09 has been entered.

2. Applicant's arguments filed 10/7/09 have been fully considered but they are not deemed to be persuasive.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 6, 8-9 and 25-27 are pending. Claims 11-12 and 28-29 have been cancelled. Claims 1, 6 and 25-26 are currently amended.

5. The information disclosure statement (IDS) submitted on 10/19/09 is acknowledged and has been reviewed.

6. The rejection of claims 1, 6, 8-9 and 27 under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 6,743,436) in view of Glen (US 4,452,817) and as evidence by Dennis et al. (US 6,623,765) is withdrawn because the Lee fails to teach the addition of propylene glycol to the pharmaceutical composition (which claims 26-26 also fail to require) and Glen alternatively teaches the addition of propylene glycol significantly higher (i.e., 10-40% see col. 6, lines 22-25 and col. 7, lines 41-45) than

what is claimed (0.5-2%). Thus the prior art does not motivate or suggest instant claims 1, 6, 8-9 and 27.

7. Claims 25-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 6,743,436) in view of Glen (US 4,452,817) and as evidence by Dennis et al. (US 6,623,765) for the reasons made of record in Paper No. 200790707 and as follows.

Lee et al. teach an intravenous injection composition (i.e., intrinsically sterile) comprising 1% propofol, 8% poloxamer 188 and 5% polyethylene glycol 400 (as it relates to claims 25; see Example 7, col. 7, lines 32-45) which is "transparent" (thus clear to the naked eye) (see col. 5, lines 15-20 as it relates to claim 25). Lee also teaches the composition comprising propofol does not support microbial growth (see col. 7, lines 40-45; intrinsically comprising an antimicrobial agent as required by claims 25-26). Because Lee does not teach the addition of propylene glycol and lipid, the composition comprises "less than 1%" lipid and 0-1% propylene glycol (as required by instant claim 25).

Lee also teaches use of sodium hydroxide in their pharmaceutical compositions which intrinsically would act as a pH modifier (see col. 5, lines 33-35, as required by instant claims 25-26).

However, Lee fails to teach the specific percentages of polyethylene glycol 400 and propylene glycol (as required by instant claim and 26). Nonetheless, Lee teaches

concentrations of polyethylene glycol 400 (versus propylene glycol) may vary from 0.5% to 5% as exemplified in examples 6-8 at col. 7.

As stated *In re Harris*, 409 F.3d 1339, 74 USPQ2d 1951 (Fed. Cir. 2005)(claimed alloy held obvious over prior art alloy that taught ranges of weight percentages overlapping, and in most instances completely encompassing, claimed ranges; furthermore, narrower ranges taught by reference overlapped all but one range in claimed invention). However, if the reference's disclosed range is so broad as to encompass a very large number of possible distinct compositions, this might present a situation analogous to the obviousness of a species when the prior art broadly discloses a genus. See MPEP § 2131.03

Glen et al. teach an aqueous formulation comprising 2, 6-diisopropylphenol (propofol) at 1-2 % (see col. 7 lines 17-24) and a block-copolymer PLURONIC F68 (i.e., Poloxamer 188 or P188) in the range of 2-30%, and PEG in the range of 2-30% (as in claim 25). Glen also teaches that the composition further comprises citric acid (a pH modifier) (see col. 3, lines 7-10 and col. 4, lines 51-52). Because Glen does not teach the inclusion of propylene glycol, it is reasonable to conclude that this formulation of Glen is free of propylene glycol (i.e., has 0% propylene glycol) (as required by claim 25). The formulation further does not support microbial growth as it comprises an antimicrobial excipient (i.e., sodium metabisulfate) (see col. 3, lines 3; as required by instant claim 25).

However, Glen fails to teach the addition of 1% propylene glycol as required by instant claim 26. Nonetheless Glen also teaches amounts of propylene glycol may be from 5-20% in their other embodiments (see col. 3, lines 29-30).

One of ordinary skill in the art would have been motivated to modify the teachings of Lee by adding citric acid and NaOH to the composition to help maintain a

physiological pH (as a buffering agent) and to help stabilization of the pharmaceutical solutions.

Even though Lee fails to teach the addition of propylene glycol to the propofol composition, Glen teaches that propylene glycol may be added to compositions of propofol. As evidence by Dennis et al, the solubility of non-polar drugs can be significantly increased when dissolved in propylene glycol by influencing the hydrophobic forces in the system (see col. 8, lines 11-15). Therefore, since propofol is poorly soluble in water, one of ordinary skill in the art would have been motivated to add propylene glycol to a pharmaceutical formulation to resolve any undissolved propofol particle in the composition.

One of ordinary skill in the art would have been motivated to modify Glen's concentrations (i.e., 5-20%) with Lee's teaching of exclusion of propylene glycol, as a result-effective variable, i.e., a variable that achieves a recognized result and, therefore, the determination of the optimum or workable dosage range one of ordinary skill in the art would have been motivated to vary in the range form 0%- 5% to determine the concentrations that result in an effective parameter.

8. Claims 1, 6, 8-9 and 25-7 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-47 of (U.S. Patent 7,550,155) for the reason made of record in Paper No. 20090707 and as follows.

Examiner acknowledges Applicants' request to hold this rejection in abeyance until final disposition of the claims of the Patent '155. Until, such a time, the provisional rejection on the grounds of obviousness-type double patenting is maintained.

9. No claim is allowed.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIRLEY V. GEMBEH whose telephone number is (571)272-8504. The examiner can normally be reached on 8:30 -5:00, Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL HARTLEY can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. V. G./
Examiner, Art Unit 1618
1/8/10

/Robert C. Hayes/
Primary Examiner, Art Unit 1649